DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

OPNAVINST 1500.57
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OPNAV INSTRUCTION 1500.57

From: Chief of Naval Operations

Subj: SURFACE WARFARE TRAINING STRATEGY

Ref: (a) OPNAVINST 1500.51A
(b) OPNAVINST 1500.8M
(c) OPNAVINST 5311.7

1. Purpose. To provide a strategy and actions required for effective surface warfare training through the year 2000 and beyond.

2. Background

a. Establishing a 600 ship Navy with its highly technical weapons and engineering systems presents a complex training problem. Training systems and methodologies must be developed which capitalize on advances in technology and reduce the costs of training in dollars and manpower. We must develop training support capabilities to aid ship commanding officers in shouldering the additional shipboard training requirements associated with more complex platforms.

b. In addition to the development of new training requirements and methodologies, consistently high standards in the planning and execution of shore and shipboard training will become increasingly important. As complexity and variety of training systems increases, so must the emphasis on maintaining the highest standards in the training community, both ashore and in the shipboard environment.

c. "Revolution at sea" studies are ongoing to determine the characteristics and capabilities of our surface ships of the early twenty-first century. These studies will address future force levels, force structure, platform capabilities, application of advanced technology to ship design and personnel/training requirements.

d. A spin-off of this effort will be identification of advanced shipboard training capabilities that have application in the near term as well as the next century. Although the studies will probably point toward lower platform manning requirements, they are also likely to point toward higher training requirements/levels for the fewer remaining personnel.

3. Assumptions. During the past years, we have witnessed significant changes in the way the Navy does business. These changes must be considered in the development of future training systems and methodology. Some of these changes are:

a. An increased number of homeports will reduce the fleet's access to large, centralized training facilities and increase pressures to expand shipboard training.

b. Constrained budgets will increase the pressure at all levels to maximize efficiency and effectiveness of training.

c. Ships and aircraft will be constrained by reduced operating tempo and flying hour restrictions, this will apply pressure to maximize efficiency and effectiveness of training.

d. Increasingly expensive schoolhouse training will apply pressures to expand shipboard training.

e. Limits on quality and quantity of available manpower will necessitate high standards of training to enable available manpower to effectively operate and maintain the fleet.

f. Increasing complexity of systems invariably leads to longer training pipelines and an increase in the number of people in a student/trainee status.

4. Strategy. We must obtain maximum benefit from the limited resources (both dollars and people) available now and in the future. The following guidance builds on the requirements of reference (a) to accomplish this goal:

a. Shore versus shipboard training

(1) Generally, shore based training systems should provide training in basic operator/maintenance skills and very advanced individual/team skills. Additionally, a major focus of shore based training should be ensuring that consistent standards are maintained in shore based basic training, in shore based very advanced training and, in some cases, assessing the skills training conducted in the shipboard environment.

(2) Generally, shipboard training systems combined with on the job training on the actual shipboard equipment should provide reinforcement of basic operator/maintenance skills and

progressively advance the trainee(s) through watch qualification skills to advanced individual/team skills. Some advanced training will need to be augmented by shore based training (e.g., naval gunfire support team training, single platform ASW team training, firefighting team training) prior to progression to very advanced shore based training. As Battle Force Team Training (BFTT) capabilities evolve, some very advanced training will shift to the shipboard training scenario.

(3) The strategy in (1) and (2) above implies a migration of some training presently conducted ashore to the shipboard environment. Additionally, the increased complexity of shipboard systems will increase the training burden to be accomplished by our ships. The requirement for shore based training command maintenance of high training standards will be increased rather than reduced, by the migration of training. Providing training materials for shipboard use will be a key role of shore based training commands. Additionally, shore based training commands will continue to play a key role in assessment of shipboard training efforts.

(4) Shipboard training systems must be improved to provide adequate resources to the ship's commanding officer as indicated in 4b. Funding and manpower resources will be programmed toward this goal as much as is possible in the future.

(5) With each new class of ship or new system(s), we must determine the proper mix of onboard and shore based training as an integral part of ship design.

(6) Prior to expanding any shore based trainer program, we must assess requirements in terms of ships to be supported, their life expectancy, and analyze existing and alternative methods to meet those requirements such as onboard training systems provided by embedded trainers or other methodologies.

(7) When developing new curricula, we must ensure only that information which is absolutely essential is included in the final product in order to keep training pipelines to a minimum.

b. Shipboard training

(1) As indicated in paragraph 4a above, the likely migration of some training from ashore to the shipboard environment combined with increasingly complex ship systems will increase the shipboard training burden. The ship's role in the continuum of training will include the following:

(a) Reinforcement of operator/maintenance skills.

(b) Progression of trainees to watchstation skills.

(c) Continued progression of trainees to advanced individual/team skills. This effort will be augmented in some instances by shore-based training.

(2) Ship commanding officers must be provided with adequate resources that provide sufficient capability for increased shipboard training requirements. These resources, as a minimum, must include:

(a) Training systems and equipment that are capable of providing effective training to reinforce basic individual skills and progress to advanced individual/team skills.

(b) Trained personnel qualified to conduct effective training. In a number of instances, this will involve externally provided instructors. Additionally, shore based training should provide trainees with adequate skills to train their shipmates on the school graduate's acquired expertise. Finally, shipboard training systems and equipment should provide capabilities that allow selected shipboard personnel to be trained in the effective utilization of the training equipment itself.

(c) In the event of limited shipboard instructor resources, shore based training facilities will need to retain a capability for augmenting shipboard resources either by exportable instructors or by operating very advanced shore based trainers at a less advanced level.

(3) Training must be clearly recognized by acquisition and support agencies as a high priority requirement in every ship. Development of highly reliable ship systems will reduce maintenance hours and provide more shipboard training time. Reduction or automation of administrative and logistics functions must support the increased training requirements and reduce required numbers of logistics and administrative requirements and personnel.

(4) Consideration must be given to providing the capability to conduct onboard training with every system acquisition. We must be able to train on the platforms we will fight. The same interfaces that permit ships' systems to work together and conduct systems tests should also be designed to support onboard training. The goal is to have an integrated onboard training system. Such training systems must provide instruction, feedback, and life cycle logistic support.

c. Manpower

(1) Manpower must be a key decision factor in designing new systems. Long training pipelines reduce the availability of personnel to the fleet. Complex systems require high caliber personnel who are becoming more difficult to recruit and retain. Acquisition (HARDMAN) methodology has been developed to ensure these factors are not overlooked in the development of new systems and the Navy Training Plan process.

(2) As systems become more complex and numerous, unified and more comprehensive plans to accomplish training must be developed. We must move toward generic pipelines (which can teach the basics of many systems) and training continua (such as those under development for Electronic Warfare, Anti-Submarine Warfare, Anti-Air Warfare) to reduce pipelines and eliminate redundancies.

d. Standards. Shore based training has been carefully controlled and provided with authoritative oversight to ensure correct and consistent content, realism wherever possible, and highly qualified instructors. Measures must be taken, in the process of shifting shore based training to the shipboard environment, to ensure continued high standards of training. Some of these measures will include the following:

(1) Training equipment/devices/packages must include a capability for examining or assessing the trainee's comprehension of the training material. This capability should be integrated with and support completion of existing qualification programs such as personnel qualification standards.

(2) The training equipment/devices/packages must ultimately defer to and not replace the ship's qualified instructors. The final examination process for a particular qualification must be accomplished by the commanding officer, his or her qualified instructors, or an external assessment agency, where prescribed. Training devices should be designed, where possible, to assist the qualification agent in the final examination process by means such as scenario generation capability.

5. Action. In conjunction with the Navy training planning process (reference (b)) and the acquisition process of developing manpower and training (MPT) requirements (reference (c)), the following actions are required for proper execution of the surface warfare training strategy:

a. Deputy Chief of Naval Operations (Surface Warfare)(DCNO) (SW). The DCNO (SW) acts as both program and resource sponsor for training systems and functions associated with this strategy. Where appropriate, the DCNO (SW) will review the development of those few MPT requirements sponsored by other Deputy Chief of Naval Operations/Director Major Staff Offices for which this instruction may have applicability. Additionally, the DCNO (SW) is responsible for the following:

(1) Early development of tentative operational requirements and operational requirements to support execution of this strategy.

(2) Programming manpower and resources necessary for effective execution of this stragegy.

(3) Appropriate review of new developments (as defined in reference (b)) to ensure that the elements of continuum and area training plans are appropriately integrated into new developments.

(4) Exercise final approval authority on matters relative to appropriate shore versus ship based mix of training functions. Where appropriate, participate in such determinations for separately sponsored training programs for which this instruction may have applicability.

(5) Exercise final approval authority on matters relative to implementation of generic training systems in lieu of platform or system specific training systems. Where appropriate, participate in such determinations for separately sponsored programs for which this instruction may have applicability.

(6) Exercise authoritative oversight to ensure effective implementation of this strategy.

b. Systems Commanders. Systems commanders are responsible for the following:

(1) Development of reliable ship systems to allow increased shipboard time for the conduct of training.

(2) Development of high quality hardware and software training systems as part of the shipboard equipment suite to maximize training capabilities onboard ship. Hardware and software systems of this type should also incorporate, to the maximum extent possible:

(a) Capability for shipboard instructor training to effectively utilize the hardware/software systems.

(b) Capability for shipboard instructor scenario generation and variation.

(c) Capability for automatic playback/assessment and generation of necessary records associated with training conducted utilizing the hardware/software.

(3) Incorporation of available non-tactical ADP or stand alone training systems developed by other Department of the Navy or Department of Defense agencies into new development design. The intent is to automate training functions and training support functions to the maximum extent, both ashore and shipboard, consonant with the maintenance of high standards.

(4) Ensure cognizant systems command code, other support agency, or designated program manager effectively implements the provisions of this strategy.

c. Principal Development Activity. If other than a systems commander, execute the actions normally assigned to a systems commander.

d. Chief of Naval Education and Training (CNET). CNET is responsible for the following:

(1) Ensure the maintenance of high standards in the development of training systems that support the execution of this strategy. This applies to shore based training systems and in shipboard training systems developed by CNET.

(2) Maintain the capability to provide trained instructors for shipboard training in instances where ship personnel assets preclude effective training.

(3) Provide trained instructors for assessment of shipboard training levels, where prescribed or requested by appropriate authority.

(4) As the training agent, assist the DCNO (SW) in the review of systems commanders' proposed options for training software and hardware systems in new developments.

(5) As training agent for new developments, make recommendations to the DCNO (SW) as to the appropriate mix of shore and shipboard training.

(6) Maximize the effectiveness and efficiency of future training pipelines in terms of generic training systems, where appropriate, or other means of supplanting shore based training systems with other training systems.

e. Training Agent. Where the training agent is other than CNET, execute the actions normally assigned to CNET.

f. Fleet Commanders in Chief. Fleet Commanders in Chief, through their type commanders, training commands, or other designated representation (e.g., fleet project team, MPT advisory board, etc.) shall fully participate in implementation of this strategy and are responsible for the following:

(1) Early identification of resources necessary to support this strategy.

(2) Provisions for incorporation of adequate measures in shipboard training systems to provide:

(a) Effective training systems and equipment

(b) Trained instructors

(3) Authoritative oversight of training functions under their cognizance to ensure the maintenance of high standards in the execution of this strategy.

(4) The Fleet Commanders in Chief, as the final customer, must provide timely and thorough assessment of the actions in 4a through 4c. Identification of inadequate resources and identification of inadequate training standards is essential to the execution of this strategy.

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